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ABSTRACT

This document contains two papers related to the 1993-94 Schools and Staffing Survey (SASS). The first paper documents some of the problems that were encountered during student sample selection and the methods used to resolve those problems. It also provides some suggestions to alleviate some of the problems in future SASS studies. Significant problems were: (1) missing sampling data; (2) schools that would not cooperate; (3) problems with the instructions; (4) duplicate students; (5) timing problems; (6) matching problems; (7) omitted numbers of classes students took; and (8) teachers incorrectly identified as ineligible. The second paper explores options for using information from the Private School Survey (PSS) to ratio adjust the SASS to achieve agreement between the two surveys. Two broad classes of solutions are discussed. The first involved extrapolation from previous enumerations of the PSS to produce estimates, and the second involved interpolation between the 1997-98 PSS and preliminary information for the 1999-2000 PSS. Five attachments describe extrapolated values and estimated values for the 1995-96 list frame. (SLD)

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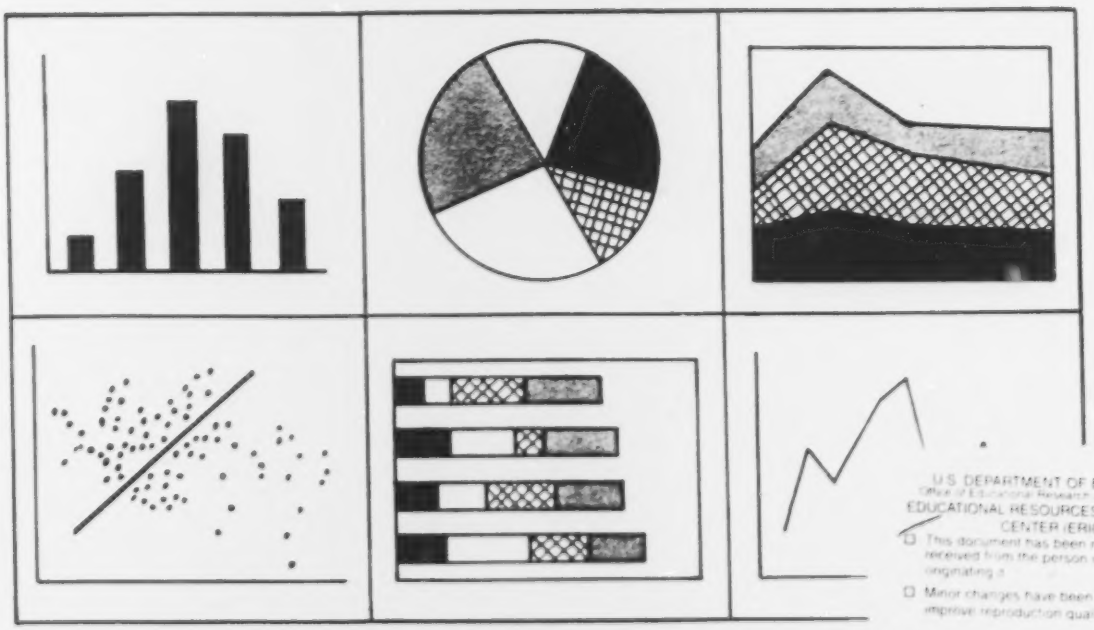
Working Paper Series

SASS Documentation:
1993-94 SASS Student Sampling Problems;
Solutions for Determining the Numerators for the
SASS Private School (3B) Second-Stage Factors

Working Paper No. 98-05 March 1998



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Working Paper No. 98-05 March 1998

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March 1998

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SASS Documentation:

1993-94 SASS Student Sampling Problems;

Solutions for Determing the Numerators for the SASS Private School (3B) Second-Stage Factors

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Prepared for:

U.S. Department of Education
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National Center for Education Statistics

March 1998

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Part One: 1993-94 SASS Student Sampling Problems

I. INTRODUCTION

The 1993-94 school year was the first time the Student Records Survey was included as part of the Schools and Staffing Survey (SASS). This memorandum documents some of the problems we encountered during student sample selection, the methods used to resolve these problems, and provides some suggestions to alleviate some of the problems in future enumerations.

II. BACKGROUND

For the 1993-94 SASS, about 13,000 schools, 67,000 teachers, 7,600 libraries and librarians, and 6,900 students were selected[1] as follows:

- Private and public sample schools were selected first.
- All principals from SASS sample schools were in sample for the School Administrator Survey,
- A sample of teachers was selected within each of the SASS sample schools for the Teacher Survey,
- A subsample of SASS sample schools was selected for the Library and Librarian Surveys,
- A subsample of SASS sample schools and teachers was selected for the Student Record Survey.

Students were selected for sample through a complicated procedure. From the teachers selected within SASS subsampled schools, three teachers were subsampled per school, one class period per teacher, and two students per class period as follows:

- During the selection of the sample for the SASS School Survey, we selected a subsample of the SASS public, BIA, and private sample schools to participate in the Student Records Survey. A total of 1,751 schools (1,370 public and 381 private) was selected for the subsample.

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[1]Kaufman et al., *1993-94 Schools and Staffing Survey: Sample Design and Estimation*, U. S. Department of Education, Office of Educational Research and Improvement, October 1996.

- From each of the student subsample schools, we selected a subsample of three of the school's sample teachers. If a school had fewer than three sample teachers, we kept whatever number they had.

- For each of the school's sample teachers, we selected a class period as follows:

  1) We selected five sample class periods from all of the class periods at the school.

  2) For each of the three sample teachers, we determined if the teacher taught an eligible class during one of the selected periods.

  3) If a sample teacher had no eligible class during any of the school's five sample periods, we selected five more sample periods. We continued selecting five class periods until at least one eligible sample class period was identified for each of the three teachers.

  4) Of the periods identified as eligible for a sample teacher, we selected one class period.

- We requested the roster of students for the selected class period and selected two students from the class roster of the selected period for each of the school's sample teachers.

A member of the school's staff completed questionnaires for each sample student (six students per school), using information from the student's administrative record.

III. PROBLEMS ENCOUNTERED DURING STUDENT SAMPLE SELECTION

Many problems were encountered during the student sample selection process, and many lessons were learned. Sections A-H below describe some of the problems that arose. We also explain how the problems were resolved.

A. *Missing Sampling Data*

Some sampling data we needed to accurately process student records through the weighting procedure was missing from a large number of student records. We resolved this problem by several means:

1. Some of the data which was missing on the file had actually been reported and were available on student sampling worksheets. The data either had not been keyed or had been keyed incorrectly.

2. In a few cases where a student's record had missing data, the student was taught by the same teacher or was from the same school as another sample student whose record contained the data we needed. In these instances, we copied the appropriate data from one student's records to the other.

3. As a last resort, we filled the missing fields through an imputation procedure. Imputation rates are provided in Section IV.

B. *Schools Refused to Cooperate with Sampling*

Many schools were reluctant to provide student names and the associated information over the telephone. To get interviews in these cases, personal visits were made to the schools by Census Bureau Staff from regional offices. Because of the expense, some of the schools (such as those located in remote parts of Alaska and in some areas of California) could not be visited. For these schools, an additional attempt was made to obtain the interviews by telephone.

The number of personal visits made by type of school are:

Public	189
Private	83
BIA	16

School nonresponse rates are provided in Section IV.

C. *Problems with the Sampling Instructions*

The sampling instructions may have been too complicated or too time consuming to be understood and completed by telephone. For example, it was possible for a respondent school to go through three different sets of class periods for all three of its sample teachers to identify one eligible class period per teacher.

The instructions for selecting sample class periods were difficult to apply in schools with unusual schedules. We also suspect that some respondent schools did not follow our sampling instructions since there were unrealistic values for some variables on many student records.

D. *Duplicate Students*

If a student was selected for more than one of a school's sample teachers, instructions were for the interviewer to place an 'M', to denote 'MULTIPLE', in a field on the student sampling worksheet. We discovered that this data had been entered on the worksheet per instruction in many cases, however, the

information had not been transferred from the worksheet to the file during the keying operation. We were forced to identify duplicate student records through a tedious clerical operation.

The number of students selected more than once by type of school were:

Public	26
Private	12
BIA	5

E. *Timing Problems*

Some school schedules conflicted with our sampling schedule. Census Bureau personnel in Jeffersonville had difficulty contacting some schools because the schools were closed for holidays or vacation during the time period we designated for sampling. Jeffersonville personnel began making calls to the schools January 3, 1994, and completed the calls on February 14, 1994.

F. *Teachers Did Not Match School*

In a few cases, a school was called and information was requested for a particular teacher, but the teacher was not employed by the school that had been telephoned. After investigating, it was found that the teacher actually taught at a different school and that the mix-ups were between private and public schools with similar names. The teachers we were trying to locate were usually public school teachers, but the telephone numbers we had called were for the private schools.

G. *Number of Classes Students Took Was Not Asked*

To correctly determine a student's probability of selection, it is necessary to know how many classes a sample student was taking. The number of classes a student was taking was not asked, and because it was not known, the student probability of selection was computed with the assumption that all students in a school took the same number of classes. This made the student weights biased.

H. *Teachers Incorrectly Classified as Ineligible*

During the student sampling procedure, some of the teachers selected for the student subsample were incorrectly classified as ineligible (i.e., not teachers) by Census Bureau staff in Jeffersonville. The misclassified teachers included teachers such as those that teach only one class (like band class) and special reading teachers who teach selected students in different schools.

Because these teachers were misclassified as ineligible, no sample students were selected from them. These misclassified teachers were accounted for during the student weighting procedure with the misclassified teachers adjustment factor.

The number of teachers incorrectly classified as ineligible by the staff in Jeffersonville were:

Public	117
Private	18
BIA	16

The proportion of teachers classified as out-of-scope are provided in Section IV.

IV. FREQUENCY COUNTS FOR THE STUDENT SAMPLING PROBLEMS

A. *Response Rates for the SASS Student Survey by Type of School*

The response rates in tables 1 and 2 below show what proportion of student records were considered complete. For the calculation of the rates, 'eligible' counts are defined as the total number of students selected for interview and 'interviewed' counts are of eligible students whose records were completed and returned.

Table 1. Response rates for students from SASS public schools

Type of school		Weighted count of interviewed students	Weighted count of eligible students	Response rate [1,2]
BIA[3] Schools	Elementary	20,073	21,958	91.4%
	Secondary	5,685	5,734	99.1%
	Combined	9,779	10,745	91.0%
NAI[4] Schools	Elementary	194,956	222,432	87.6%
	Secondary	102,976	116,148	88.7%
	Combined	9,176	9,870	93.0%
Schools in Alaska	Elementary	48,748	60,670	80.4%
	Secondary	33,206	41,312	80.4%
	Combined	11,134	14,902	74.4%
Other Public Schools	Elementary	23,305,301	25,405,458	91.7%
	Secondary	12,657,678	13,991,028	90.5%
	Combined	860,397	905,504	95.0%

[1] Source: 1994 Student Weighting Output for Student Noninterview Adjustment Factor
Weighted counts of students were used where the weight used was defined as:
WEIGHT=KBWGT * KNRAF* KMTAF where,
KBWGT = Student Basic Weight
KNRAF = Nonresponse Adjustment for schools not participating in the student sampling procedure
KMTAF = Adjustment for Teachers Incorrectly Misclassified as Ineligible
[2] Response Rate = Interviewed Students/Eligible Students
[3] BIA = Bureau of Indian Affairs Schools
[4] NAI = Native American Indian Schools

Table 2. Response rates for students from SASS private schools

Private schools	Weighted count of students interviewed	Weighted count of students eligible	Response[1] rate
Elementary Schools	2,308,243	2,532,418	91.2%
Combined Schools	1,115,480	1,361,077	82.0%
Secondary Schools	550,098	619,774	88.8%

[1] Source: 1994 Student Weighting Output for Student Noninterview Adjustment Factor
Weighted counts of students were used where the weight used was defined as:
WEIGHT=KBWGT * KNRAF* KMTAF where,
KBWGT = Student Basic Weight
KNRAF = Nonresponse Adjustment for schools not participating in the student sampling procedure
KMTAF = Adjustment for Teachers Incorrectly Misclassified as Ineligible

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B. *School Response Rates for SASS Student Survey*

The response rates in table 3 below are for schools that were selected to participate in the Student Records Survey. These results are not indicators of how many students were interviewed, but of how many schools participated in the student survey by completing any of the six sample students' questionnaires.

Table 3. Response rates[1] for schools

Public schools			
BIA schools		NAI schools	
Elementary	94.4%	Elementary	92.8%
Combined	92.3%	Combined	96.9%
Secondary	95.0%	Secondary	94.1%
Schools in Alaska		Other public schools	
Elementary	86.6%	Elementary	87.4%
Combined	83.0%	Combined	82.2%
Secondary	94.3%	Secondary	89.3%
Private schools			
Elementary	84.0%		
Combined	68.6%		
Secondary	89.7%		

[1] Source: 1994 Student Weighting Output (School Nonresponse Adjustment Factor)
Weighted counts of students to compute response rates where the weight used was for public schools defined as:

Weight =	DBSWGT* STSFAC * SMPADJ	
DBSWGT	=	School Basic Weight
STSFAC	=	Student Subsample Factor from the SASS School Survey
SMPADJ	=	School Sampling Adjustment Factor from the SASS School Survey

And for private schools defined as:

Weight =	FWGT4* FSSUB4 * SMPADJ	
FWGT4	=	School Basic Weight
FSSUB4	=	Student Subsample Factor from the SASS School Survey
SMPADJ	=	School Sampling Adjustment Factor from the SASS School Survey

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C. *Proportion of Teachers Classified as Out-of-Scope*

If a teacher was classified as out-of-scope for the Teacher Survey, no students were selected from the teacher since the teacher was no longer in sample. Teachers were also classified as out-of-scope if the associated sample school had been classified as out-of-scope. Table 4 shows what proportion of public and private school teachers were classified as out-of-scope, and the percent distribution of those out-of-scope teachers among elementary, combined, and secondary schools.

Table 4. Proportion of teachers classified as out-of-scope and the percent distribution of those out-of-scope teachers by school level

Type of school	Proportion[1,2] of teachers classified as out-of-scope	Percent distribution of out-of-scope teachers by school level		
		Elementary	Combined	Secondary
BIA schools	6.1%	67.0%	29.7%	3.3%
NAI schools	5.7%	58.9%	0.5%	40.5%
All other public schools	4.5%	71.9%	2.7%	25.5%
Private schools	5.4%	57.7%	29.2%	13.1%

[1] Proportion = (Number of out-of-scope teachers) / (Total Number of public teachers)

[2] Weighted counts were used where,

WEIGHT = TTSBW * STSFAC * KNRAF for public schools, and
= TTSBW * FSSUB4 * KNRAF for private schools

And,

TTSBW = Teacher Basic Weight
STSFAC = Student Subsample Factor from the SASS Public School Survey
KNRAF = Nonresponse Adjustment for Schools not Participating in the Student Sampling
FSSUB4 = Student Subsample Factor from the SASS Private School Survey

D. *Imputation Rates for Items used in the SASS Student Survey Weighting Procedure*

Much of the data needed to process student records through the weighting were missing. After exhausting other sources, we added this information through imputation. The table below identifies the variables that were imputed and imputation rates by school type.

Table 5. Imputation rates by item description[1]

Type of school	Number of times student is taught by teacher each week (NMCLMT)		Number of periods the sample teacher teaches an eligible class each week (TNMPAPWK)		Class size for the selected class period (TNUMSTCL)		Number of student records
	Frequency	Imputation rate	Frequency	Imputation rate	Frequency	Imputation rate	
BIA	2	0.3%	33	5.5%	53	8.8%	602
Private	31	2.5%	51	4.1%	77	6.2%	1,236
Public[2]	81	1.6%	162	3.2%	266	5.2%	5,095
All	114	1.6%	246	3.6%	396	5.7%	6,933

[1] Unweighted counts are presented in this table.

[2] Public school counts were obtained using records of departmental teachers only.

V. RECOMMENDATIONS FOR IMPROVING THE PROCESS

Listed below are recommendations to be incorporated in future SASS Student Records Surveys:

1. The question "How many classes does the student take" should be added to the questionnaire to avoid the problems we encountered in determining the correct student probability of selection.

2. Census Bureau interviewers should be sure to ask and capture all of the information on the sampling worksheets and the Jeffersonville staff should implement an edit procedure whereby they carefully record all information contained on the sampling worksheet. This would reduce the missing and incorrect data problems we encountered and eliminate the need for the clerical transfer of the information to identify multiple records.

3. There should be a close examination of the flow and wording of questions on the student sampling worksheet and appropriate revisions made to make the worksheet easier for interviewers to understand what information is needed.

4. The selection of sample class periods should be made more "user-friendly". A process that is easier to follow and comprehend by telephone would yield more accurate and reliable sampling results.

5. A procedure with clearer guidelines for determining teacher eligibility for the student survey should be developed so that the definitional problems which led to the misclassification of teachers is eliminated.

Part Two: Solutions for Determining the Numerators for the SASS Private School (3B) Second-Stage Factors

I. INTRODUCTION

For the first time in 1993-1994, the Private School Survey (PSS) was conducted in the same year as SASS. Consequently, PSS data could easily be used to ratio adjust the SASS private school totals in order to achieve agreement between the two surveys. Historically, SASS had produced lower totals than PSS due to methodological differences.

Looking ahead to the next SASS, which is to be conducted in 1998-1999, we can see that PSS cannot be used directly for ratio adjustment since the survey enumeration years do not coincide. PSS will be conducted in 1997-1998 and again in 1999-2000.

This paper explores options for using PSS information to ratio adjust SASS. This is desirable in order to maintain the consistency that was established between SASS and PSS totals in 1993-1994. These options fall in two broad classes of solutions. The first involves extrapolation from previous enumerations of PSS to produce estimates for the 1998-1999 school year. See Section II. The other broad class of solutions involves interpolation between the 1997-1998 PSS and whatever preliminary information is available for the 1999-2000 PSS. See Section III. We will also provide a chronological summary of future plans. See Section IV.

This paper concentrates on estimation solutions to the consistency problem. A future paper will focus on operational solutions to this problem.

II. EXTRAPOLATION METHOD

A. *Preliminary Work - 1991-1992 vs. 1993-1994*

We have developed a linear model based on the rate of change between the 1991-1992 PSS and the 1993-1994 PSS totals that were used for the 1993-1994 SASS 2nd stage numerator cells. This model is of the form:

$$X_{2_i} \pm \frac{|X_{1_i} - X_{2_i}|}{X_{1_i}} * X_{2_i}$$

where: X_{2_i}: 1993-94 PSS total for a particular cell
X_{1_i}: 1991-92 PSS total for the corresponding cell
+: is used when there is an increase in the PSS total from 1991-92 to 1993-94

-: is used when there is a decrease in the PSS total from 1991-92 to 1993-94

This estimation was done separately for both the list frame and area frame. These equations were used to extrapolate estimated values for 1995-1996 PSS for the same cells. The goal is to propose a set of cells for the 2nd stage numerator where the cells are of sufficient size and display a "reasonable" rate of change. See Attachment A for initial results. We have used the following rules for collapsing:

- If the extrapolated value is less than 50, unless...
- One of the cells involved in collapsing shows an increase and the other shows a decrease, unless...
- The extrapolated value is less than 15 (collapse anyway).

As you can see from Attachment A, there is a need for collapsing in the list frame. Attachment C shows the final results (i.e., the suggested extrapolation cells) for the list frame. These values will be compared to actual 1995-1996 PSS list frame data when it becomes available in order to evaluate the accuracy of this simple prediction method.

As you can see from Attachment B, there is a need for collapsing in the area frame. Attachment D shows the final results (i.e., the suggested extrapolation cells) for the area frame. These values will be compared to actual 1995-1996 area frame data when it becomes available in order to evaluate the accuracy of this simple prediction method. We don't put much stock in the area frame results because this frame is unstable. Even though the size of the area frame did not change much from 1991 to 1993, the distribution within religious orientation changed substantially.

At this time we do not have a separate cell for K-terminal schools. We did not do anything special to identify these types of schools in 1991-1992. In 1993-1994 and 1995-1996, we did a lot of updating work to identify these types of schools. Once we have 1995-1996 PSS data available, we will develop linear equations of the form $A + Bx_i$ using 1993-1994 PSS and 1995-1996 PSS K-terminal totals as the two points.

B. *Suggested Model for 1991-1992/1993-1994/1995-1996/1997-1998 Method*

We will look at several possible models to predict an estimated value for 1997-1998 PSS. Here again, we will do this separately for both the list frame and area frame. These models are as follows:

1. Rate of Change
2. $A + Bx_i$
3. $A + Bx_i + Cx_i^2$
4. $A + Bx_i + Cx_i^2 + Dx_i^3$
5. Logarithmic model

Once we get the results from the 1995-1996 PSS weighting, we will come up with preliminary models to predict the 1997-1998 PSS results, using 1991-1992/1993-1994/1995-1996 data. Initially we will use the extrapolation cells suggested in Attachment B. When we have the 1997-1998 PSS results, we will compare them to the predicted results. We will also evaluate all four alternative models using the 1997-1998 PSS results. The most parsimonious model that adequately explains the observed trend will be considered the best model.

III. INTERPOLATION BETWEEN 1997-1998 PSS AND 1999-2000 PSS LIST FRAME UPDATE RESULTS

A. *Proposed Methodology*

The methodology discussed below will only be used for the list frame.

We will determine a value for the 1999-2000 PSS list frame for each of the 19 affiliations by the following:

1999-2000 PSS = (1997-1998 PSS) - (expected 1999-2000 deaths) + (1999-2000 births) * (expected 1999-2000 in-scope proportion of births)

We propose doing the estimation for 1999-2000 PSS in this way because of the timing involved in terms of what's available.

For the expected deaths and expected in-scope birth proportion, we propose using the most recent values that are available. So for 1999-2000, the number of deaths and the in-scope proportion would be 1997-1998 values. The number of births is the actual value from the list frame updating, conducted in the spring of 1999. For state list births with unknown affiliation, we will use the 1997-98 proportions to allocate the unknown.

Note that we will look at the death count and in-scope birth proportion over time to evaluate the reasonableness of using the 1997-1998 information for 1998-1999 SASS. We will also look at the stability of death rates over time versus death counts.

We will use the predicted 1999-2000 numbers in one of the following two ways:

1. We will use the actual 1991-1992/1993-1994/1995-1996/1997-1998 values along with the predicted 1999-2000 values. We will fit a model and interpolate a value for each of the 19 affiliations for the 1998-1999 school year. These interpolated values will be the proposed 2nd stage numerators for the 1998-1999 SASS.

2. We will use the actual 1997-1998 values and the predicted 1999-2000 values to do a simple linear interpolation.

We have done a preliminary test for this methodology by predicting results for 1995-1996 PSS by using the above formula in the following way. See Attachment E. We will compare the preliminary results with the results from the 1995-1996 PSS weighting when they become available.

1995-1996 PSS = (1993-1994 PSS) - (expected 1995-1996 deaths) + (expected 1995-1996 births) * (expected 1995-1996 in-scope proportion of births)

where: a) Expected 1995-1996 death counts are the 1993-1994 death counts. We have matched the 1991-1992 in-scope records (ISR = 1 or 2) with the 1993-1994 out-of-scope records (ISR = 3). The matching records are the deaths. We have totals for the 19 affiliations.

b) Expected 1995-1996 birth counts are the 1993-1994 birth counts. We have totaled the birth records (those with the first three digits of PIN = 'A93' or first digit of PIN = 'W', 'X', 'Y', or 'Z') by the 19 affiliations. Even though we have the actual birth counts available for the 1995-1996 PSS, we did not use them, because we were not able to identify the state list births by affiliation.

c) Expected 1995-1996 in-scope proportions of births are the 1993-1994 in-scope proportions of births. These proportions are available in the 1995 ASA paper, Jackson, B., Frazier, R., (1995). "Improving the Coverage of Private Elementary-Secondary Schools".

Note that we use counts and not rates for the births and deaths. It doesn't make much difference in terms of which was used because there was not much change between the 1993-1994 total private schools and the estimated totals for 1995-1996.

We plan to repeat this process for 1997-1998 PSS as a further evaluation.

Note that for the area frame, we may need to do a simple extrapolation to predict results for the 1998-1999 school year due to timing constraints. The preferred approach for the area frame interpolation will be the same as the approach for the area frame in Section II. In other words, we will use a rate of change based model to interpolate area frame results.

B. *Related Issues - Area Frame to List Frame*

In this section, we discuss matching between different components of the area frame and list frame.

We have matched the 1991-1992 certainty PSU records to the 1993-1994 certainty PSU records. Nearly all the 1991-1992 certainty PSU schools were in the 1993-1994 certainty PSUs (as we would expect). There is no need to adjust our interpolated estimate for records from area frame certainty PSUs.

We have also matched the 1991-1992 nonoverlap PSU records to the 1993-1994 overlap PSU records. Note that the 1991-1992 nonoverlap PSUs are the same as the 1993-1994 overlap PSUs. There were a low number of matches (about 28%). In theory, if the match rate between these two groups were high, we would need to add a special "adjustment piece" to the interpolated area frame value to adjust for 1991-1992 area frame births being picked up in 1993-1994.

In addition, we matched the 1991-1992 area frame certainty PSU records to the 1993-1994 list frame births. There were only two matches. We also matched the 1991-1992 (nonoverlap and overlap) PSU records to the 1993-1994 list frame births. Here again, there were a low number of matches (about 15%). Because of the low match rate, we did not do a special adjustment for the list frame interpolation because of the list frame births having been previously picked up in the area frame. The adjustment would involve estimating the "piece" of overlap and subtracting it from the interpolated value.

In the future, we will match the previous year's area frame adds with the next year's list frame adds (i.e., match 1993-1994 area frame adds with 1995-1996 list frame adds and 1995-1996 area frame adds with 1997-1998 list frame adds). If the match rate remains stable over time, we will do a special adjustment for the list frame interpolation because of the list frame births having been previously picked up in the area frame. We may also consider matching the 1997-1998 area frame adds to the 1999-2000 list frame adds to help estimate the overlap for the 1998-1999 SASS.

IV. CHRONOLOGICAL SUMMARY OF FUTURE PLANS

- As soon as 1995-1996 PSS data becomes available, we will compare the extrapolated values (from linear equations) for the 2nd stage numerators (see Attachment B) to the actual values to evaluate the "closeness" of our predictions. We will do the same comparison for the extrapolated list frame values (see Attachment C) and the extrapolated area frame value (see the end of Section II.A).

- Once again, as soon as the 1995-1996 data on K-terminal schools becomes available, we will use this together with the 1993-1994 data on K-terminal schools to develop linear equations to produce extrapolated estimates for 1997-1998 K-terminal schools.

- We will use the results of the 1995-1996 PSS along with 1991-1992 PSS and 1993-1994 PSS totals to predict models for 1997-1998 PSS as stated in Section II.B. These will be compared to actual 1997-1998 PSS results.

- We will explore operational solutions to estimating total private schools in 1998-1999.

- We will use results from 1997-1998 PSS along with the three previous PSS iterations to predict models for 1999-2000 PSS as stated in Section II.B.

- We will compare the preliminary results shown in Attachment E to the actual results from 1995-1996 PSS once they are available. We will also predict results for 1997-1998 PSS using the same methodology of Section III.A once 1995-1996 results are available.

- We will track the death rate and the in-scope birth rate over time (as discussed in Section III.A).

- We will continue to match the most recent year's list frame adds to the prior year's area frame adds.

Attachment A: Initial Extrapolated List Frame Values for the Cells of the Second-Stage Numerator Cells for 1995 PSS

Will compare these to actual 1995 PSS when available.

CELL	X1	TOT91	X3	TOT93	CHANGE	RATE_PCT	X5	EXTRAP95
Catholic - Elementary (< 150)	91	1478	93	1338	140	9.472	95	1211.26
Catholic - Elementary (150-299)	91	3603	93	3389	214	5.939	95	3187.71
Catholic - Elementary (300-499)	91	1457	93	1522	65	4.461	95	1589.90
Catholic - Elementary (500-749)	91	454	93	474	20	4.405	95	494.88
Catholic - Elementary (750 +)	91	63	93	78	15	23.810	95	96.57
Catholic - Combined (< 150)	91	144	93	144	0	0.000	95	144.00
Catholic - Combined (150-299)	91	89	93	89	0	0.000	95	89.00
Catholic - Combined (300-499)	91	68	93	62	6	8.824	95	56.53
Catholic - Combined (500-749)	91	43	93	40	3	6.977	95	37.21
Catholic - Combined (750 +)	91	17	93	14	3	17.647	95	11.53
Catholic - Secondary (< 150)	91	112	93	88	24	21.429	95	69.14
Catholic - Secondary (150-299)	91	299	93	269	30	10.033	95	242.01
Catholic - Secondary (300-499)	91	296	93	298	2	0.676	95	300.01
Catholic - Secondary (500-749)	91	244	93	240	4	1.639	95	236.07
Catholic - Secondary (750 +)	91	225	93	233	8	3.556	95	241.28
Friends - Elementary	91	32	93	36	4	12.500	95	40.50
Friends - Combined	91	39	93	34	5	12.821	95	29.64
Friends - Secondary	91	8	93	5	3	37.500	95	3.13
Episcopal - Elementary	91	214	93	223	9	4.206	95	232.38
Episcopal - Combined	91	80	93	87	7	8.750	95	94.61
Episcopal - Secondary	91	40	93	38	2	5.000	95	36.10
Hebrew Day - Elementary	91	110	93	110	0	0.000	95	110.00
Hebrew Day - Combined	91	52	93	37	15	28.846	95	26.33
Hebrew Day - Secondary	91	57	93	51	6	10.526	95	45.63
Sol. Schechter - Elementary	91	52	93	50	2	3.846	95	48.08
Sol. Schechter - Combined	91	6	93	3	3	50.000	95	1.50
Sol. Schechter - Secondary	91	1	93	2	1	100.000	95	4.00

A: Initial Extrapolated List Frame Values for the Cells of the Second-Stage Numerator Cells for 1995 PSS, cont'd.

Will compare these to actual 1995 PSS when available.

CELL	X1	TOT91	X3	TOT93	CHANGE	RATE_PCT	X5	EXTRAP95
Other Jewish - Elementary	91	187	93	186	1	0.535	95	185.01
Other Jewish - Combined	91	105	93	106	1	0.952	95	107.01
Other Jewish - Secondary	91	76	93	81	5	6.579	95	86.33
Luth./Missouri - Elementary	91	993	93	953	40	4.028	95	914.61
Luth./Missouri - Combined	91	25	93	35	10	40.000	95	49.00
Luth./Missouri - Secondary	91	58	93	54	4	6.897	95	50.28
Luth./Wisconsin - Elementary	91	350	93	341	9	2.571	95	332.23
Luth./Wisconsin - Combined	91	11	93	10	1	9.091	95	9.09
Luth./Wisconsin - Secondary	91	23	93	21	2	8.696	95	19.17
Evang./Lutheran - Elementary	91	102	93	98	4	3.922	95	94.16
Evang./Lutheran - Combined	91	7	93	7	0	0.000	95	7.00
Evang./Lutheran - Secondary	91	2	93	1	1	50.000	95	0.50
Other Lutheran - Elementary	91	47	93	45	2	4.255	95	43.09
Other Lutheran - Combined	91	10	93	10	0	0.000	95	10.00
Other Lutheran - Secondary	91	2	93	2	0	0.000	95	2.00
Seventh Day - Elementary	91	786	93	733	53	6.743	95	683.57
Seventh Day - Combined	91	281	93	247	34	12.100	95	217.11
Seventh Day - Secondary	91	60	93	59	1	1.667	95	58.02
CSI - Elementary	91	1102	93	1282	180	16.334	95	1491.40
CSI - Combined	91	1137	93	1262	125	10.994	95	1400.74
CSI - Secondary	91	109	93	114	5	4.587	95	119.23
Am. Assoc. Chr. Sch. - Elem.	91	165	93	122	43	26.061	95	90.21
Am. Assoc. Chr. Sch. - Comb.	91	758	93	646	112	14.776	95	550.55
Am. Assoc. Chr. Sch. - Sec.	91	9	93	12	3	33.333	95	16.00
Exc. Child. - Elementary	91	6	93	9	3	50.000	95	13.50
Exc. Child. - Combined	91	249	93	267	18	7.229	95	286.30
Exc. Child. - Secondary	91	5	93	2	3	60.000	95	0.80

A: Initial Extrapolated List Frame Values for the Cells of the Second-Stage Numerator Cells for 1995 PSS, cont'd.

Will compare these to actual 1995 PSS when available.

CELL	X1	TOT91	X3	TOT93	CHANGE	RATE_PCT	X5	EXTRAP95
Mil. Col. - Elementary	91	10	93	1	9	90.000	95	0.10
Mil. Col. - Combined	91	10	93	16	6	60.000	95	25.60
Mil. Col. - Secondary	91	14	93	16	2	14.286	95	18.29
Montessori - Elementary	91	323	93	480	157	48.607	95	713.31
Montessori - Combined	91	85	93	169	84	98.824	95	336.01
Montessori - Secondary	91	1	93	1	0	0.000	95	1.00
Nat. Assoc. Ind. Sch. - Elem.	91	238	93	233	5	2.101	95	228.11
Nat. Assoc. Ind. Sch. - Comb.	91	473	93	496	23	4.863	95	520.12
Nat. Assoc. Ind. Sch. - Sec.	91	163	93	155	8	4.908	95	147.39
Nat. Ind. Pr.Sc. - Elementary	91	65	93	68	3	4.615	95	71.14
Nat. Ind. Pr.Sc. - Combined	91	47	93	54	7	14.894	95	62.04
Nat. Ind. Pr.Sc. - Secondary	91	10	93	6	4	40.000	95	3.60
All Else - Elementary (< 150)	91	1960	93	1879	81	4.133	95	1801.35
All Else - Elementary (150-299)	91	278	93	263	15	5.396	95	248.81
All Else - Elementary (300-499)	91	67	93	67	0	0.000	95	67.00
All Else - Elementary (500-749)	91	12	93	13	1	8.333	95	14.08
All Else - Elementary (750 +)	91	4	93	5	1	25.000	95	6.25
All Else - Combined (< 150)	91	3176	93	3460	284	8.942	95	3769.40
All Else - Combined (150-299)	91	450	93	472	22	4.889	95	495.08
All Else - Combined (300-499)	91	263	93	221	42	15.970	95	185.71
All Else - Combined (500-749)	91	82	93	95	13	15.854	95	110.06
All Else - Combined (750 +)	91	52	93	42	10	19.231	95	33.92
All Else - Secondary (< 150)	91	138	93	157	19	13.768	95	178.62
All Else - Secondary (150-299)	91	31	93	24	7	22.581	95	18.58
All Else - Secondary (300-499)	91	13	93	12	1	7.692	95	11.08
All Else - Secondary (500-749)	91	9	93	0	9	100.000	95	0.00
All Else - Secondary (750 +)	91	4	93	4	0	0.000	95	4.00

Attachment B: Extrapolated Area Frame Values for the Cells of the Second-Stage Numerator Cells for 1995 PSS

Will compare these to actual 1995 PSS when available.

CELL	X1	TOT91	X3	TOT93	CHANGE	RATE_PCT	X5	EXTRAP95
Catholic - Elementary	91	226	93	62	164	72.5664	95	17.01
Catholic - Combined	91	34	93	6	28	82.3529	95	1.06
Catholic - Secondary	91	47	93	1	46	97.8723	95	0.02
Other Rel. - Elementary	91	437	93	645	208	47.5973	95	952.00
Other Rel. - Combined	91	555	93	935	380	68.4685	95	1575.18
Other Rel. - Secondary	91	52	93	41	11	21.1538	95	32.33
Nonsec. - Elementary	91	360	93	148	212	58.8889	95	60.84
Nonsec. - Combined	91	339	93	172	167	49.2625	95	87.27
Nonsec. - Secondary	91	21	93	16	5	23.8095	95	12.19

Attachment C: Extrapolated List Frame Values for the Cells of the Second-Stage Numerator Cells for 1995 PSS

Will compare these to actual 1995 PSS when available (FINAL).

CELL	X1	TOT91	X3	TOT93	CHANGE	RATE_PCT	X5	EXTRAP95
Catholic - Elementary (< 150)	91	1478	93	1338	140	9.4723	95	1211.26
Catholic - Elementary (150-299)	91	3603	93	3389	214	5.9395	95	3187.71
Catholic - Elementary (300-499)	91	1457	93	1522	65	4.4612	95	1589.90
Catholic - Elementary (500-749)	91	454	93	474	20	4.4053	95	494.88
Catholic - Elementary (750 +)	91	63	93	78	15	23.8095	95	96.57
Catholic - Combined (< 150)	91	144	93	144	0	0.0000	95	144.00
Catholic - Combined (150-299)	91	89	93	89	0	0.0000	95	89.00
Catholic - Combined (300-499)	91	68	93	62	6	8.8235	95	56.53
Catholic - Combined (500 +)	91	60	93	54	6	10.0000	95	48.60
Catholic - Secondary (< 150)	91	112	93	88	24	21.4286	95	69.14
Catholic - Secondary (150-299)	91	299	93	269	30	10.0334	95	242.01
Catholic - Secondary (300-499)	91	296	93	298	2	0.6757	95	300.01
Catholic - Secondary (500-749)	91	244	93	240	4	1.6393	95	236.07
Catholic - Secondary (750 +)	91	225	93	233	8	3.5556	95	241.28
Friends - Elementary	91	32	93	36	4	12.5000	95	40.50
Friends - Combined/Secondary	91	47	93	39	8	17.0213	95	32.36
Episcopal - Elementary	91	214	93	223	9	4.2056	95	232.38
Episcopal - Combined	91	80	93	87	7	8.7500	95	94.61
Episcopal - Secondary	91	40	93	38	2	5.0000	95	36.10
Hebrew Day - Elementary	91	110	93	110	0	0.0000	95	110.00
Hebrew Day - Combined/Secondary	91	109	93	88	21	19.2661	95	71.05
Sol. Schechter - ALL GRADES	91	59	93	55	4	6.7797	95	51.27
Other Jewish - Elementary	91	187	93	186	1	0.5348	95	185.01
Other Jewish - Combined	91	105	93	106	1	0.9524	95	107.01
Other Jewish - Secondary	91	76	93	81	5	6.5789	95	86.33

C: Extrapolated List Frame Values for the Cells of the Second-Stage Numerator Cells for 1995 PSS, cont'd.

Will compare these to actual 1995 PSS when available (FINAL).

CELL	X1	TOT91	X3	TOT93	CHANGE	RATE_PCT	X5	EXTRAP95
Luth./Missouri - Elementary	91	993	93	953	40	4.0282	95	914.61
Luth./Missouri - Combined	91	25	93	35	10	40.0000	95	49.00
Luth./Missouri - Secondary	91	58	93	54	4	6.8966	95	50.28
Luth./Wisconsin - ALL GRADES	91	384	93	372	12	3.1250	95	360.38
Evang./Lutheran - ALL GRADES	91	111	93	106	5	4.5045	95	101.23
Other Lutheran - ALL GRADES	91	59	93	57	2	3.3898	95	55.07
Seventh Day - Elementary	91	786	93	733	53	6.7430	95	683.57
Seventh Day - Combined	91	281	93	247	34	12.0996	95	217.11
Seventh Day - Secondary	91	60	93	59	1	1.6667	95	58.02
CSI - Elementary	91	1102	93	1282	180	16.3339	95	1491.40
CSI - Combined	91	1137	93	1262	125	10.9938	95	1400.74
CSI - Secondary	91	109	93	114	5	4.5872	95	119.23
Am. Assoc. Chr. Sch. - Elem.	91	165	93	122	43	26.0606	95	90.21
Am. Assoc. Chr. Sch. - Comb.	91	758	93	646	112	14.7757	95	550.55
Am. Assoc. Chr. Sch. - Sec.	91	9	93	12	3	33.3333	95	16.00
Exc. Child. - ALL GRADES	91	260	93	278	18	6.9231	95	297.25
Mil. Col. - ALL GRADES	91	34	93	33	1	2.9412	95	32.03
Montessori - Elementary	91	323	93	480	157	48.6068	95	713.31
Montessori - Combined/Secondary	91	86	93	170	84	97.6744	95	336.05
Nat. Assoc. Ind. Sch. - Elem.	91	238	93	233	5	2.1008	95	228.11
Nat. Assoc. Ind. Sch. - Comb.	91	473	93	496	23	4.8626	95	520.12
Nat. Assoc. Ind. Sch. - Sec.	91	163	93	155	8	4.9080	95	147.39
Nat. Ind. Pr.Sc. - Elementary	91	65	93	68	3	4.6154	95	71.14
Nat. Ind. Pr.Sc. - Comb./Sec.	91	57	93	60	3	5.2632	95	63.16

C: Extrapolated List Frame Values for the Cells of the Second-Stage Numerator Cells for 1995 PSS, cont'd.

Will compare these to actual 1995 PSS when available (FINAL).

CELL	X1	TOT91	X3	TOT93	CHANGE	RATE_PCT	X5	EXTRAP95
All Else - Elementary (< 150)	91	1960	93	1879	81	4.1327	95	1801.35
All Else - Elementary (150-299)	91	278	93	263	15	5.3957	95	248.81
All Else - Elementary (300-499)	91	67	93	67	0	0.0000	95	67.00
All Else - Elementary (500 +)	91	16	93	18	2	12.5000	95	20.25
All Else - Combined (< 150)	91	3176	93	3460	284	8.9421	95	3769.40
All Else - Combined (150-299)	91	450	93	472	22	4.8889	95	495.08
All Else - Combined (300-499)	91	263	93	221	42	15.9696	95	185.71
All Else - Combined (500-749)	91	82	93	95	13	15.8537	95	110.06
All Else - Combined (750 +)	91	52	93	42	10	19.2308	95	33.92
All Else - Secondary (< 150)	91	138	93	157	19	13.7681	95	178.62
All Else - Secondary (150 +)	91	57	93	40	17	29.8246	95	28.07

Attachment D: Extrapolated Area Frame Values for the Cells of the Second-Stage Numerator Cells for 1995 PSS

Will compare these to actual 1995 PSS when available (FINAL).

CELL	X1	TOT91	X3	TOT93	CHANGE	RATE_PCT	X5	EXTRAP95
Catholic - ALL GRADES	91	307	93	69	238	77.5244	95	15.51
Other Rel. - Elementary	91	437	93	645	208	47.5973	95	952.00
Other Rel. - Combined	91	555	93	935	380	68.4685	95	1575.18
Other Rel. - Secondary	91	52	93	41	11	21.1538	95	32.33
Nonsec. - ALL GRADES	91	720	93	336	384	53.3333	95	156.80

Attachment E:Estimated Values for '95-'96 PSS List Frame

Includes estimates from area frame certainty PSUs. Compare to actual '95-'96 PSS totals when available.

Cell	'93-'94 PSS Totals	Expected # Deaths from '93-'94 PSS	Expected # Births from '95-'96 PSS	Expected In-Scope Proportion of Births for '95-'96 PSS	Estimated '95-'96 PSS Totals
01: Military Colleges	33	4	1	0	29
02: Catholic	8380	267	167	0.875	8259
03: Friends	79	4	7	0.875	81
04: Episcopal	414	6	38	0.8571	441
05: Hebrew Day	203	22	30	0.9038	208
06: Solomon Schechter	56	2	8	0.9038	61
07: Other Jewish	404	33	45	0.9038	412
08: Lutheran-Missouri	1098	24	25	0.8966	1096
09: Lutheran-Wisconsin	374	8	4	0.8966	370
10: Evangelical Lutheran	117	4	5	0.8966	117
11: Other Lutheran	59	0	1	0.8966	60
12: 7th Day Adventist	1043	77	37	0	966
13: Christian Sch. Int'l.	2705	135	570	0.9255	3098
14: Amer. Assoc. Christ. Sch.	798	61	51	0	737
15: Nat. Assoc. Prv. Sch. Exc. Chd.	290	17	41	0.6538	300
16: Montessori	875	32	100	0.8718	930
17: Nat. Assoc. Indep. Sch.	899	23	56	0.8235	922
18: Nat. Indep. Prv. Sch. Assoc.	138	10	13	1	141
19: All Else	7544	681	1142	0.6667	7624
	25,509				25,852

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Listing of NCES Working Papers to Date

Please contact Ruth R. Harris at (202) 219-1831
if you are interested in any of the following papers

Number	Title	Contact
94-01 (July)	Schools and Staffing Survey (SASS) Papers Presented at Meetings of the American Statistical Association	Dan Kasprzyk
94-02 (July)	Generalized Variance Estimate for Schools and Staffing Survey (SASS)	Dan Kasprzyk
94-03 (July)	1991 Schools and Staffing Survey (SASS) Reinterview Response Variance Report	Dan Kasprzyk
94-04 (July)	The Accuracy of Teachers' Self-reports on their Postsecondary Education: Teacher Transcript Study, Schools and Staffing Survey	Dan Kasprzyk
94-05 (July)	Cost-of-Education Differentials Across the States	William Fowler
94-06 (July)	Six Papers on Teachers from the 1990-91 Schools and Staffing Survey and Other Related Surveys	Dan Kasprzyk
94-07 (Nov.)	Data Comparability and Public Policy: New Interest in Public Library Data Papers Presented at Meetings of the American Statistical Association	Carrol Kindel
95-01 (Jan.)	Schools and Staffing Survey: 1994 Papers Presented at the 1994 Meeting of the American Statistical Association	Dan Kasprzyk
95-02 (Jan.)	QED Estimates of the 1990-91 Schools and Staffing Survey: Deriving and Comparing QED School Estimates with CCD Estimates	Dan Kasprzyk
95-03 (Jan.)	Schools and Staffing Survey: 1990-91 SASS Cross-Questionnaire Analysis	Dan Kasprzyk
95-04 (Jan.)	National Education Longitudinal Study of 1988: Second Follow-up Questionnaire Content Areas and Research Issues	Jeffrey Owings
95-05 (Jan.)	National Education Longitudinal Study of 1988: Conducting Trend Analyses of NLS-72, HS&B, and NELS:88 Seniors	Jeffrey Owings

Listing of NCES Working Papers to Date--Continued

Number	Title	Contact
95-06 (Jan.)	National Education Longitudinal Study of 1988: Conducting Cross-Cohort Comparisons Using HS&B, NAEP, and NELS:88 Academic Transcript Data	Jeffrey Owings
95-07 (Jan.)	National Education Longitudinal Study of 1988: Conducting Trend Analyses HS&B and NELS:88 Sophomore Cohort Dropouts	Jeffrey Owings
95-08 (Feb.)	CCD Adjustment to the 1990-91 SASS: A Comparison of Estimates	Dan Kasprzyk
95-09 (Feb.)	The Results of the 1993 Teacher List Validation Study (TLVS)	Dan Kasprzyk
95-10 (Feb.)	The Results of the 1991-92 Teacher Follow-up Survey (TFS) Reinterview and Extensive Reconciliation	Dan Kasprzyk
95-11 (Mar.)	Measuring Instruction, Curriculum Content, and Instructional Resources: The Status of Recent Work	Sharon Bobbitt & John Ralph
95-12 (Mar.)	Rural Education Data User's Guide	Samuel Peng
95-13 (Mar.)	Assessing Students with Disabilities and Limited English Proficiency	James Houser
95-14 (Mar.)	Empirical Evaluation of Social, Psychological, & Educational Construct Variables Used in NCES Surveys	Samuel Peng
95-15 (Apr.)	Classroom Instructional Processes: A Review of Existing Measurement Approaches and Their Applicability for the Teacher Follow-up Survey	Sharon Bobbitt
95-16 (Apr.)	Intersurvey Consistency in NCES Private School Surveys	Steven Kaufman
95-17 (May)	Estimates of Expenditures for Private K-12 Schools	Stephen Broughman
95-18 (Nov.)	An Agenda for Research on Teachers and Schools: Revisiting NCES' Schools and Staffing Survey	Dan Kasprzyk
96-01 (Jan.)	Methodological Issues in the Study of Teachers' Careers: Critical Features of a Truly Longitudinal Study	Dan Kasprzyk

Listing of NCES Working Papers to Date--Continued

Number	Title	Contact
96-02 (Feb.)	Schools and Staffing Survey (SASS): 1995 Selected papers presented at the 1995 Meeting of the American Statistical Association	Dan Kasprzyk
96-03 (Feb.)	National Education Longitudinal Study of 1988 (NELS:88) Research Framework and Issues	Jeffrey Owings
96-04 (Feb.)	Census Mapping Project/School District Data Book	Tai Phan
96-05 (Feb.)	Cognitive Research on the Teacher Listing Form for the Schools and Staffing Survey	Dan Kasprzyk
96-06 (Mar.)	The Schools and Staffing Survey (SASS) for 1998-99: Design Recommendations to Inform Broad Education Policy	Dan Kasprzyk
96-07 (Mar.)	Should SASS Measure Instructional Processes and Teacher Effectiveness?	Dan Kasprzyk
96-08 (Apr.)	How Accurate are Teacher Judgments of Students' Academic Performance?	Jerry West
96-09 (Apr.)	Making Data Relevant for Policy Discussions: Redesigning the School Administrator Questionnaire for the 1998-99 SASS	Dan Kasprzyk
96-10 (Apr.)	1998-99 Schools and Staffing Survey: Issues Related to Survey Depth	Dan Kasprzyk
96-11 (June)	Towards an Organizational Database on America's Schools: A Proposal for the Future of SASS, with comments on School Reform, Governance, and Finance	Dan Kasprzyk
96-12 (June)	Predictors of Retention, Transfer, and Attrition of Special and General Education Teachers: Data from the 1989 Teacher Followup Survey	Dan Kasprzyk
96-13 (June)	Estimation of Response Bias in the NHES:95 Adult Education Survey	Steven Kaufman
96-14 (June)	The 1995 National Household Education Survey: Reinterview Results for the Adult Education Component	Steven Kaufman

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Number	Title	Contact
96-15 (June)	Nested Structures: District-Level Data in the Schools and Staffing Survey	Dan Kasprzyk
96-16 (June)	Strategies for Collecting Finance Data from Private Schools	Stephen Broughman
96-17 (July)	National Postsecondary Student Aid Study: 1996 Field Test Methodology Report	Andrew G. Malizio
96-18 (Aug.)	Assessment of Social Competence, Adaptive Behaviors, and Approaches to Learning with Young Children	Jerry West
96-19 (Oct.)	Assessment and Analysis of School-Level Expenditures	William Fowler
96-20 (Oct.)	1991 National Household Education Survey (NHES:91) Questionnaires: Screener, Early Childhood Education, and Adult Education	Kathryn Chandler
96-21 (Oct.)	1993 National Household Education Survey (NHES:93) Questionnaires: Screener, School Readiness, and School Safety and Discipline	Kathryn Chandler
96-22 (Oct.)	1995 National Household Education Survey (NHES:95) Questionnaires: Screener, Early Childhood Program Participation, and Adult Education	Kathryn Chandler
96-23 (Oct.)	Linking Student Data to SASS: Why, When, How	Dan Kasprzyk
96-24 (Oct.)	National Assessments of Teacher Quality	Dan Kasprzyk
96-25 (Oct.)	Measures of Inservice Professional Development: Suggested Items for the 1998-1999 Schools and Staffing Survey	Dan Kasprzyk
96-26 (Nov.)	Improving the Coverage of Private Elementary-Secondary Schools	Steven Kaufman
96-27 (Nov.)	Intersurvey Consistency in NCES Private School Surveys for 1993-94	Steven Kaufman

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Number	Title	Contact
96-28 (Nov.)	Student Learning, Teaching Quality, and Professional Development: Theoretical Linkages, Current Measurement, and Recommendations for Future Data Collection	Mary Rollefson
96-29 (Nov.)	Undercoverage Bias in Estimates of Characteristics of Adults and 0- to 2-Year-Olds in the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
96-30 (Dec.)	Comparison of Estimates from the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
97-01 (Feb.)	Selected Papers on Education Surveys: Papers Presented at the 1996 Meeting of the American Statistical Association	Dan Kasprzyk
97-02 (Feb.)	Telephone Coverage Bias and Recorded Interviews in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-03 (Feb.)	1991 and 1995 National Household Education Survey Questionnaires: NHES:91 Screener, NHES:91 Adult Education, NHES:95 Basic Screener, and NHES:95 Adult Education	Kathryn Chandler
97-04 (Feb.)	Design, Data Collection, Monitoring, Interview Administration Time, and Data Editing in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-05 (Feb.)	Unit and Item Response, Weighting, and Imputation Procedures in the 1993 National Household Education Survey (NHES:93)	Kathryn Chandler
97-06 (Feb.)	Unit and Item Response, Weighting, and Imputation Procedures in the 1995 National Household Education Survey (NHES:95)	Kathryn Chandler
97-07 (Mar.)	The Determinants of Per-Pupil Expenditures in Private Elementary and Secondary Schools: An Exploratory Analysis	Stephen Broughman
97-08 (Mar.)	Design, Data Collection, Interview Timing, and Data Editing in the 1995 National Household Education Survey	Kathryn Chandler

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Number	Title	Contact
97-09 (Apr.)	Status of Data on Crime and Violence in Schools: Final Report	Lee Hoffman
97-10 (Apr.)	Report of Cognitive Research on the Public and Private School Teacher Questionnaires for the Schools and Staffing Survey 1993-94 School Year	Dan Kasprzyk
97-11 (Apr.)	International Comparisons of Inservice Professional Development	Dan Kasprzyk
97-12 (Apr.)	Measuring School Reform: Recommendations for Future SASS Data Collection	Mary Rollefson
97-13 (Apr.)	Improving Data Quality in NCES: Database-to-Report Process	Susan Ahmed
97-14 (Apr.)	Optimal Choice of Periodicities for the Schools and Staffing Survey: Modeling and Analysis	Steven Kaufman
97-15 (May)	Customer Service Survey: Common Core of Data Coordinators	Lee Hoffman
97-16 (May)	International Education Expenditure Comparability Study: Final Report, Volume I	Shelley Burns
97-17 (May)	International Education Expenditure Comparability Study: Final Report, Volume II, Quantitative Analysis of Expenditure Comparability	Shelley Burns
97-18 (June)	Improving the Mail Return Rates of SASS Surveys: A Review of the Literature	Steven Kaufman
97-19 (June)	National Household Education Survey of 1995: Adult Education Course Coding Manual	Peter Stowe
97-20 (June)	National Household Education Survey of 1995: Adult Education Course Code Merge Files User's Guide	Peter Stowe
97-21 (June)	Statistics for Policymakers or Everything You Wanted to Know About Statistics But Thought You Could Never Understand	Susan Ahmed
97-22 (July)	Collection of Private School Finance Data: Development of a Questionnaire	Stephen Broughman

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Number	Title	Contact
97-23 (July)	Further Cognitive Research on the Schools and Staffing Survey (SASS) Teacher Listing Form	Dan Kasprzyk
97-24 (Aug.)	Formulating a Design for the ECLS: A Review of Longitudinal Studies	Jerry West
97-25 (Aug.)	1996 National Household Education Survey (NHES:96) Questionnaires: Screener/Household and Library, Parent and Family Involvement in Education and Civic Involvement, Youth Civic Involvement, and Adult Civic Involvement	Kathryn Chandler
97-26 (Oct.)	Strategies for Improving Accuracy of Postsecondary Faculty Lists	Linda Zimbler
97-27 (Oct.)	Pilot Test of IPEDS Finance Survey	Peter Stowe
97-28 (Oct.)	Comparison of Estimates in the 1996 National Household Education Survey	Kathryn Chandler
97-29 (Oct.)	Can State Assessment Data be Used to Reduce State NAEP Sample Sizes?	Steven Gorman
97-30 (Oct.)	ACT's NAEP Redesign Project: Assessment Design is the Key to Useful and Stable Assessment Results	Steven Gorman
97-31 (Oct.)	NAEP Reconfigured: An Integrated Redesign of the National Assessment of Educational Progress	Steven Gorman
97-32 (Oct.)	Innovative Solutions to Intractable Large Scale Assessment (Problem 2: Background Questionnaires)	Steven Gorman
97-33 (Oct.)	Adult Literacy: An International Perspective	Marilyn Binkley
97-34 (Oct.)	Comparison of Estimates from the 1993 National Household Education Survey	Kathryn Chandler
97-35 (Oct.)	Design, Data Collection, Interview Administration Time, and Data Editing in the 1996 National Household Education Survey	Kathryn Chandler
97-36 (Oct.)	Measuring the Quality of Program Environments in Head Start and Other Early Childhood Programs: A Review and Recommendations for Future Research	Jerry West

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Number	Title	Contact
97-37 (Nov.)	Optimal Rating Procedures and Methodology for NAEP Open-ended Items	Steven Gorman
97-38 (Nov.)	Reinterview Results for the Parent and Youth Components of the 1996 National Household Education Survey	Kathryn Chandler
97-39 (Nov.)	Undercoverage Bias in Estimates of Characteristics of Households and Adults in the 1996 National Household Education Survey	Kathryn Chandler
97-40 (Nov.)	Unit and Item Response Rates, Weighting, and Imputation Procedures in the 1996 National Household Education Survey	Kathryn Chandler
97-41 (Dec.)	Selected Papers on the Schools and Staffing Survey: Papers Presented at the 1997 Meeting of the American Statistical Association	Steve Kaufman
97-42 (Jan. 1998)	Improving the Measurement of Staffing Resources at the School Level: The Development of Recommendations for NCES for the Schools and Staffing Survey (SASS)	Mary Rollefson
97-43 (Dec.)	Measuring Inflation in Public School Costs	William J. Fowler, Jr.
97-44 (Dec.)	Development of a SASS 1993-94 School-Level Student Achievement Subfile: Using State Assessments and State NAEP, Feasibility Study	Michael Ross
98-01 (Jan.)	Collection of Public School Expenditure Data: Development of a Questionnaire	Stephen Broughman
98-02 (Jan.)	Response Variance in the 1993-94 Schools and Staffing Survey: A Reinterview Report	Steven Kaufman
98-03 (Feb.)	Adult Education in the 1990s: A Report on the 1991 National Household Education Survey	Peter Stowe
98-04 (Feb.)	Geographic Variations in Public Schools' Costs	William J. Fowler, Jr.

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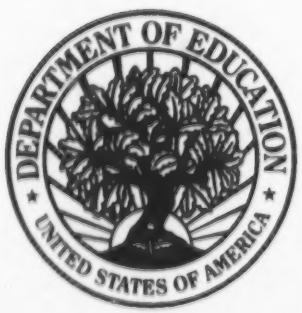
Number	Title	Contact
98-05 (Mar.)	SASS Documentation: 1993-94 SASS Student Sampling Problems; Solutions for Determining the Numerators for the SASS Private School (3B) Second-Stage Factors	Steven Kaufman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